

NOTES ON THE MYCETOPHILIDÆ WITH
DESCRIPTIONS OF NEW SPECIES

BY FRANK R. SHAW

Cornell University, Ithaca, N. Y.

In working over material preparatory to writing the chapter on the Mycetophilidæ to be published in the *Diptera of Connecticut*, a few observations were made that are believed to be best published before that work appears.

Not a great deal of work has been done in this country on this group of insects since the appearance of the *Genera Insectorum* fascicle by Johannsen in 1909. Later, in a series of bulletins published by the Maine Agricultural Experiment Station, the same author gave keys to all of the known species occurring in this country.

Since that time Edwards of the British Museum has done the most outstanding work in the group. He revised the family in 1924 and as it is the belief of the writer that the paper of Edwards is not easily accessible to the average worker on *Diptera*, it is considered to be worthwhile to give a summary of Edwards' revision, giving the arrangement of the group according to Johannsen and comparing it with the classification of Edwards.

In Johannsen's revision of the group, nine subfamilies were recognized. According to Edwards' grouping there are ten subfamilies but they are not equivalent in all cases to those of Johannsen which bear the same name. Since it is the belief of the writer that there are many of the same or closely related species occurring both in Europe and in America, it is felt that a classification should be adopted which is uniform. Consequently, the revision of Edwards is being followed in this paper. The following table lists only those genera found in North America:

Subfamilies and Genera (Johannsen)	Subfamilies and Genera (Edwards)
Subfamily Bolitophilinæ Bolitophila Hesperinus	Subfamily Bolitophilinæ Bolitophila
Subfamily Pachyneurinæ	
Subfamily Mycetobinæ Mycetobia Palæoplastyura Ditomyia Symmerus	Subfamily Ditomyiinæ Ditomyia Symmerus
Subfamily Diadocidiinæ Diadocidia	Subfamily Diadocidiinæ Diadocidia
Subfamily Ceroplatinæ Asindulum Ceroplatys Cerotelion Hesperodes Apemon Platyura	Subfamily Ceroplatinæ Asindulum Ceroplatys Hesperodes Apemon Platyura Palæoplastyura
Subfamily Macrocerinæ Macrocera	Subfamily Macrocerinæ Macrocera
Subfamily Sciophilinæ Monoclona Eudicrana Tetragoneura Sciophila Paratinia Polylepta Empalia Dziedzickia Neoempheria Mycomya Diomonus	Subfamily Sciophilinæ Monoclona Eudicrana Tetragoneura (in part) Sciophila (in part) Paratinia Polylepta (in part) Synapha Dziedzickia (in part) Neoempheria Mycomya Allocotocera Leptomorphus Neuratelia Systemna Phthinia Megalopelma

Sciophila	Sciophila
	Acnemia
	Azana
	Speolepta
	Cœlosia
Hadroneura	Hadroneura
	Gnoriste
	Boletina
	Rondaniella
	Leia
	Pnyxia
	Docosia
	Megophthalmida
	Ectrepesthoneura

Subfamily Mycetophilinæ

Gnoriste
 Probolæus
 Acnemia
 Azana
 Rondaniella
 Odontopoda
 Leptomorphus
 Allocotocera
 Boletina
 Leia
 Phthinia
 Cœlosia
 Syntemna
 Megophthalmida
 Docosia
 Anatella
 Trichonta
 Cordyla
 Brachypeza
 Rhymosia
 Allodia
 Phronia
 Telmaphilus
 Exechia
 Dynatosoma
 Opistholoba
 Epicrypta
 Mycothera
 Mycetophila

Subfamily Mycetophilinæ

Anatella
 Trichonta
 Cordyla
 Brachypeza
 Rhymosia
 Allodia
 Phronia
 Exechia
 Dynatosoma
 Epicrypta
 Mycetophila (in part)

Sceptonia	Sceptonia
Zygomyia	Zygomyia
Delopsis	Delopsis
<hr/>	
Subfamily <i>Sciarinæ</i>	Subfamily <i>Sciarinæ</i>
Eugnoriste	
Manota	
Pnyxia	
Trichosia	Trichosia
Zygoneura	Zygoneura
Metangela	
Phorodonta	Phorodonta
Rhynchosciara	
Sciara	Sciara

The chief difference between the classification of Johannsen and that of Edwards will be noted in the limits of the two subfamilies *Sciophilinæ* and *Mycetophilinæ*. Johannsen, 1911, recognized that there were two quite distinct groups in the *Mycetophilinæ* and gave a classification of these two series based on the arrangement of setulæ on the wing. Edwards, 1924, became convinced that a more natural grouping would be obtained by placing the genera included in Series I of the *Mycetophilinæ* of Johannsen in the *Sciophilinæ*.

Since some of the genera have been split or united with other genera since the date of Johannsen's work, I believe it best to mention the more important changes that have occurred.

1. The genus *Hesperinus* was removed by Johannsen to the *Bibionidæ*.

2. *Pachyneura* is now placed in a separate family related to the *Anisopodidæ*.

3. *Mycetobia* is placed with the *Anisopodidæ* by some authors or in a distinct family the *Mycetobiidæ*.

4. *Palæoplatyura* is placed with the *Ceroplastinæ* by Edwards.

5. *Cerotelion* is considered to be a subgenus of *Ceroplastus*.

6. *Diomonus* is united with the genus *Leptomorphus*.

7. *Megalopelma* includes one species of the genus *Phthinia* and probably will include some of the North American species of *Sciophila*.

8. *Speolepta* was erected for *Polylepta leptogaster* of Winnertz.

9. *Ectrepesthoneura* includes those species of *Tetragoneura* having the cubital fork near the base of the wing. According to Garrett, this genus is not valid but as the writer has not seen the evidence to support this view, he does not care to make any decision.

10. *Probolæus* is united with the genus *Lygistorhina* of the subfamily *Lygistorhininæ*.

11. *Manota* is placed in a distinct subfamily the *Manotinaæ*.

12. *Telmaphilus* is united with the genus *Phronia*.

13. *Opistholoba* is united with the genus *Mycetophila*.

14. *Mycothera* is united with the genus *Mycetophila*.

15. *Pnyxia* is considered to belong with the *Sciophilinæ* according to Edwards.

In the course of the investigation a few specimens were encountered that are worthy of a more detailed discussion. Two of these were found to have been originally recorded from Greenland and from Europe. Specimens were sent to Edwards for an examination and he confirmed the identification. The writer wishes to acknowledge the assistance given to him by Doctor Edwards at this point.

***Boletina groenlandica* Staeg.** Naturh. Tidsskr 1 : 356
(Pl. VI, Fig. 1.)

A specimen of this insect was taken by Dr. C. P. Alexander from Hermit Lake, Mt. Washington, New Hampshire. There is no figure of this species published in America so that a figure of the clasper (fig. 1) is given.

***Allodia ornatcollis* Meigan.** Syst. Bescher 1 : 269.
(Pl. VI, Fig. 2.)

This is the first record of the capture of this European species in America. Since there is no figure published in

this country of this species, the hypopygium (fig. 2) is pictured. Taken in Ithaca, N. Y. Nov. 1934.

***Exechia aviculata* sp. n.** (Pl. VI, Fig. 3.)

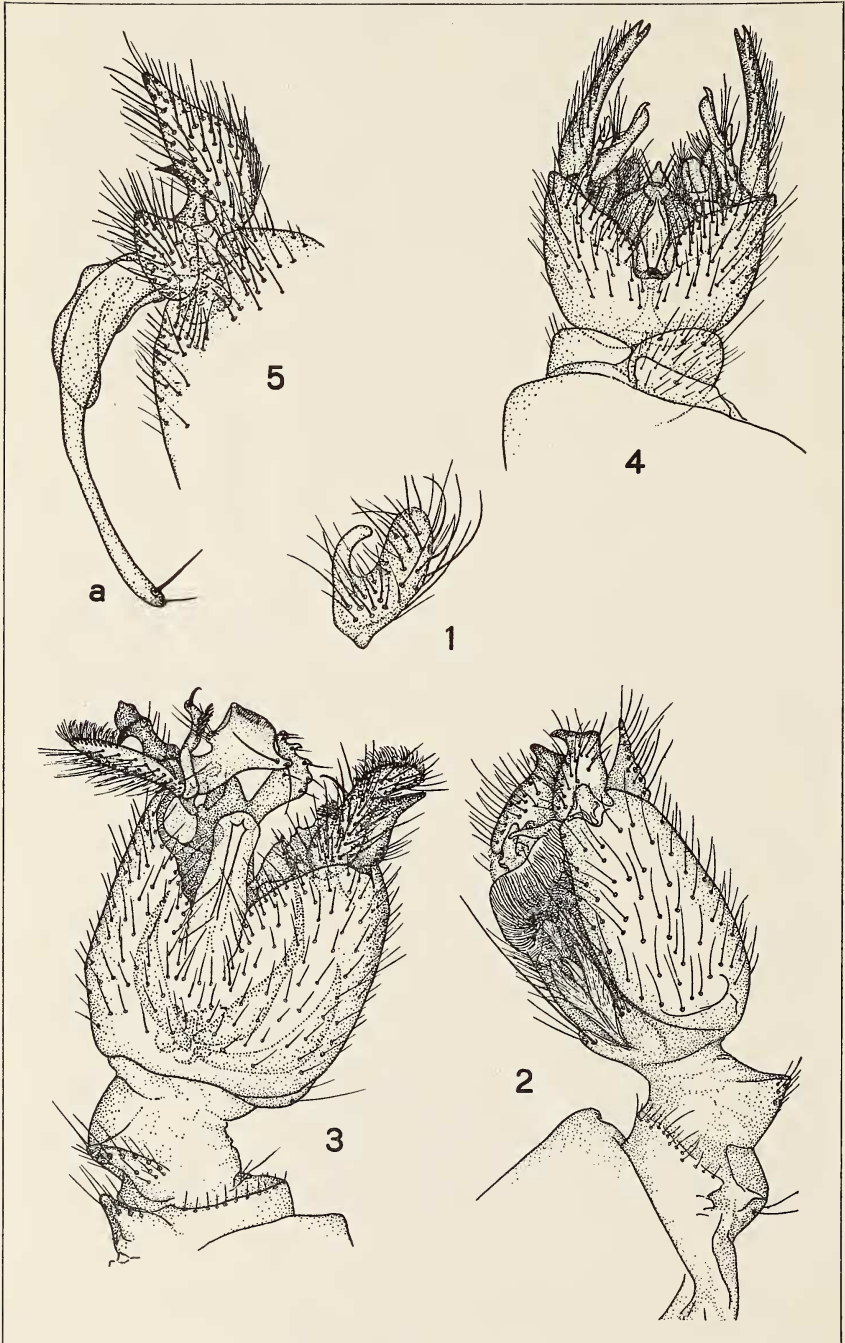
Male. Length 4 mm. Head brown, palpi and antennæ light brown, basal two joints of antennæ yellowish. Thorax brown, humeri not tinged with yellow. Abdomen brown, the last three segments somewhat darker. Coxæ and femora with a brownish cast, tibia and tarsi yellow. Prothoracic basitarsus about one fourth longer than tibia, tibia swollen at the apex. Hypopygium (fig. 3) light brown resembling somewhat that of *Exechia januarii* Lunds. Type locality, Ithaca, New York. Type in my collection, paratype in Cornell University collection.

***Exechia pollex* sp. n.** (Pl. VI, Fig. 4.)

Male. Length 3.5 mm. Head dark brown, palpi and antennæ brown, basal two segments of the antennæ light. Thorax dark brown, humeri with a light yellowish tinge. Abdomen concolorous, dark brown. Coxæ and femora yellow, tibia and tarsi somewhat darker. Prothoracic basitarsus and tibia subequal in length. Hypopygium (fig. 4) resembles that of *Exechia frigida* but differs in the details of the claspers. Type locality, Ithaca, New York. Type in my collection.

***Rhymosia triangularis* sp. n.** (Pl. VI, Fig. 5.)

Male and female. Length 4-4½ mm. Head pale brown, palpi and basal two joints of antennæ yellow, remainder of antennæ brown. Mesonotum brown, lateral margins somewhat lighter. Coxæ and femora yellow, femora slightly darkened at apices. Tibia and tarsi brownish yellow. Prothoracic basitarsus about a third longer than the tibia. Dorsum of first and sixth abdominal segments brown. The remaining segments with subtriangular brown spots with the apex of each segment as the base of the triangle. Hypopygium (fig. 5) yellow, resembling that of *Rhymosa inflata* but one of the arms of the forceps is much more slender. Type locality, South Bethlehem, New York. Type in my collection, paratype in Cornell University collection.



Shaw—Mycetophilidae

EXPLANATION OF PLATE VI.

- Figure 1. Clasper of *Boletina grænlandica*.
Figure 2. Hypopygium of *Allodia ornatcollis*.
Figure 3. Hypopygium of *Exechia aviculata*.
Figure 4. Hypopygium of *Exechia pollex*.
Figure 5. Lateral view of clasper of *Rhymosia triangularis*. A, arm of clasper.

Drawings made by D. B. Creager.

A NEW NAME FOR LITHOMYRMEX CARP.
(HYMENOPTERA)

In my revision of the fossil ants (Bull. Mus. Comp. Zoöl., 70 (1) : p. 36), which was published in January, 1930, I established the myrmicine genus *Lithomyrmex* for two species, *rugosus* and *striatus*, from the Miocene shales of Florissant, Colorado. Unfortunately, the same generic name was used by Dr. J. Clark a few months earlier for a recent species of ant, *glauerti*, from West Australia (Journ. Roy. Soc. W. Australia, 14: p. 36, 1929). I therefore propose the new name **Eulithomyrmex** for *Lithomyrmex* Carp. (*nec Lithomyrmex* Clark, 1929), to include the two extinct species from the Florissant shales—F. M. Carpenter.